

WHAT IS CLAIMED IS:

50  
61 71. An image processing apparatus for generating  
image data to be outputted by using data conversion,

5 said apparatus comprising:

first storage means for storing compressed  
conversion table data having compressed grid point data  
of a conversion table arranged by color components which  
are used to construct the image data to be outputted;

10 expansion means for expanding the compressed  
conversion table data; and

conversion means for performing said data  
conversion by interpolation operation based on the  
expanded conversion table data.

15

2. The apparatus according to claim 1, further  
comprising second storage means for storing the expanded  
conversion table data.

20

3. The apparatus according to claim 1, wherein  
said data conversion is a process of converting color  
space of image data.

25 4. The apparatus according to claim 1, wherein  
said data conversion includes complementary color  
conversion and under color removal.

5. The apparatus according to claim 1, further comprising sorting means for sorting the expanded conversion table data to generate a combination of plural color component data arranged by grid points.

6. The apparatus according to claim 1, further comprising:

input means for inputting a command indicative of print instruction and data indicative of a print medium characteristic; and

control means for expanding a plurality of conversion table data for a plurality of conversion tables corresponding to the data indicative of the print medium characteristic, and performing said data conversion by using a conversion table appropriate for a characteristic of inputted image data.

7. An image processing method for generating image data to be outputted by using data conversion, said method comprising the steps of:

expanding compressed conversion table data having compressed grid point data of a conversion table arranged by color components which are used to construct the image data to be outputted; and

performing said data conversion by interpolation

operation based on the expanded conversion table data.

8. The method according to claim 7, wherein  
said data conversion is a process of converting color  
space of image data.

9. The method according to claim 7, wherein  
said data conversion includes complementary color  
conversion and under color removal.

10. The method according to claim 7, further  
comprising the step of sorting the expanded conversion  
table data to generate a combination of plural color  
component data arranged by grid points.

11. The method according to claim 7, further  
comprising the step of:

inputting a command indicative of print  
instruction and data indicative of a print medium  
characteristic;

expanding a plurality of conversion table data for  
a plurality of conversion tables corresponding to the  
data indicative of the print medium characteristic; and

performing said data conversion by using a  
conversion table appropriate for a characteristic of  
inputted image data.

505  
304 12. A data processing method for processing data used in data conversion, said method comprising the steps of:

5 inputting conversion table data where combinations of plural color component data are arranged by grid points;

sorting the conversion table data in a color component unit; and

10 compressing the sorted conversion table data.

505  
A3 13. A computer program product comprising a computer readable medium having computer program code, for generating image data to be outputted by using data  
15 conversion, said product comprising:

expansion procedure code for expanding compressed conversion table data having compressed grid point data of a conversion table arranged by color components which are used to construct the image data to be outputted;

20 and

conversion procedure code for performing said data conversion by interpolation operation based on the expanded conversion table data.

25 14. A computer program product comprising a computer readable medium having computer program code

for processing data used in data conversion, said  
product comprising:

input procedure code for inputting conversion  
table data where combinations of plural color component  
5 data are arranged by grid points;

sorting procedure code for sorting the conversion  
table data in a color component unit; and

compression procedure code for compressing the  
sorted conversion table data.

10

15. A computer readable medium recording a  
conversion table which is used in image processing for  
generating image data by data conversion, wherein in  
said conversion table, grid point data is arranged by  
15 color components which are used to construct the image  
data, then compressed and recorded.